# South Plains College Common Course Syllabus: Math 1314 Revised August 2021

**Department:** Mathematics, Engineering, and Computer Science

**Discipline:** Mathematics

Course Number: MATH 1314

Course Title: College Algebra

Available Formats: conventional, hybrid, internet, and ITV

Campuses: Levelland, Reese, Plainview, Lubbock Center, and Dual Credit

**Course Description**. In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.

**Prerequisite:** Minimum score of 350 on the TSIA1, minimum score of 950 on the TSIA2, a diagnostic score of 6 on the TSIA2, TSI-exempt status, a successful completion with a grade of 'C' or better in MATH 0320, or successful completion of NCBM-0114.

Credit: 3 Lecture: 3 Lab: 1

**Textbook:** College Algebra with Intermediate Algebra: A Blended Course, Beecher, Penna, Johnson, and Bittinger, 2018, 1st Edition, Prentice Hall/Pearson Education

**Supplies:** Please see the instructor's course information sheet for specific supplies.

This course partially satisfies a Core Curriculum Requirement: Mathematics Foundational Component Area (020)

### **Core Curriculum Objectives addressed:**

- Communications skills—to include effective written, oral and visual communication
- Critical thinking skills—to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- Empirical and quantitative competency skills—to manipulate and analyze numerical data or observable facts resulting in informed conclusions

Student Learning Outcomes: Upon completion of this course and receiving a passing grade, the student will be able to:

- 1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
- 2. Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations.
- 3. Apply graphing techniques.
- 4. Evaluate all roots of higher degree polynomial and rational functions.
- 5. Recognize, solve and apply systems of linear equations using matrices.

**Student Learning Outcomes Assessment:** A pre- and post-test questions will be used to determine the extent of improvement that the students have gained during the semester

**Course Evaluation:** There will be departmental final exam questions given by all instructors.

Attendance/Student Engagement Policy: Attendance and engagement are the most critical activities for success in this course. The instructor maintains records of the student's attendance and submission of assignments throughout the semester. The student is expected to attend at least eighty percent (80%) of the total class meetings and submit at least eighty percent (80%) of the total class assignments to have the best chance of success. If the student fails to meet these minimum

requirements, the instructor <u>may</u> remove the student from the class with an X, upon their discretion, to help the student from harming their GPA. If the student can not receive an X, the instructor will assign an F.

Plagiarism violations include, but are not limited to, the following:

- 1. Turning in a paper that has been purchased, borrowed, or downloaded from another student, an online term paper site, or a mail order term paper mill;
- 2. Cutting and pasting together information from books, articles, other papers, or online sites without providing proper documentation;
- 3. Using direct quotations (three or more words) from a source without showing them to be direct quotations and citing them; or
- 4. Missing in-text citations.

Cheating violations include, but are not limited to, the following:

- 1. Obtaining an examination by stealing or collusion;
- 2. Discovering the content of an examination before it is given;
- 3. Using an unauthorized source of information (notes, textbook, text messaging, internet, apps) during an examination, quiz, or homework assignment;
- 4. Entering an office or building to obtain an unfair advantage;
- 5. Taking an examination for another;
- 6. Altering grade records;
- 7. Copying another's work during an examination or on a homework assignment;
- 8. Rewriting another student's work in Peer Editing so that the writing is no longer the original student's;
- 9. Taking pictures of a test, test answers, or someone else's paper.

**COVID Syllabus Statement:** If you are experiencing any of the following symptoms, please do not attend class and either seek medical attention or test for COVID-19.

- Cough, shortness of breath, difficulty breathing
- Fever or chills
- Muscles or body aches
- Vomiting or diarrhea
- New loss of taste and smell

Please also notify DeEtte Edens, BSN, RN, Associate Director of Health & Wellness, at <a href="mailto:dedens@southplainscollege.edu">dedens@southplainscollege.edu</a> or 806-716-2376. Proof of a positive test is required. A home test is sufficient but students must submit a photo of the positive result. The date of test must be written on the test result and an ID included in the photo. If tested elsewhere (clinic, pharmacy, etc.), please submit a copy of the doctor's note or email notification. Results may be emailed to DeEtte Edens, BSN, RN at <a href="mailto:dedens@southplainscollege.edu">dedens@southplainscollege.edu</a>.

A student is clear to return to class without further assessment from DeEtte Edens, BSN, RN if they have completed the 5-day isolation period, symptoms have improved, and they are without fever for 24 hours without the use of fever-reducing medication.

Students must communicate with DeEtte Edens, BSN, RN prior to their return date if still symptomatic at the end of the 5-day isolation.

**Student Code of Conduct Policy**: Any successful learning experience requires mutual respect on the part of the student and the instructor. Neither instructor nor student should be subject to others' behavior that is rude, disruptive, intimidating, aggressive, or demeaning. Student conduct that disrupts the learning process or is deemed disrespectful or threatening shall not be tolerated and may lead to disciplinary action and/or removal from class.

**Diversity Statement:** In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

**Disability Statement:** Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that

the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

**Nondiscrimination Policy:** South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

**Title IX Pregnancy Accommodations Statement:** If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To <u>activate</u> accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact the Director of Health and Wellness at 806-716-2362 or <a href="mailto:emailt

Campus Concealed Carry: Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations and Frequently Asked Questions, please refer to the Campus Carry page at: <a href="http://www.southplainscollege.edu/campuscarry.php">http://www.southplainscollege.edu/campuscarry.php</a>
Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

**SPC Bookstore Price Match Guarantee Policy:** If you find a lower price on a textbook, the South Plains College bookstore will match that price. The difference will be given to the student on a bookstore gift certificate! The gift certificate can be spent on anything in the store.

If students have already purchased textbooks and then find a better price later, the South Plains College bookstore will price match through the first week of the semester. The student must have a copy of the receipt and the book has to be in stock at the competition at the time of the price match.

The South Plains College bookstore will happily price match BN.com & books on Amazon noted as *ships from and sold by Amazon.com*. Online marketplaces such as *Other Sellers* on Amazon, Amazon's Warehouse Deals, *fulfilled by* Amazon, BN.com Marketplace, and peer-to-peer pricing are not eligible. They will price match the exact textbook, in the same edition and format, including all accompanying materials, like workbooks and CDs.

A textbook is only eligible for price match if it is in stock on a competitor's website at time of the price match request. Additional membership discounts and offers cannot be applied to the student's refund.

Price matching is only available on in-store purchases. Digital books, access codes sold via publisher sites, rentals and special orders are not eligible. Only one price match per title per customer is allowed.

## Instructor's Syllabus Math 1314 – Section 441 Fall 2022

#### **Instructor Information**

Instructor: Jerod Clopton

Office: Levelland Campus, Math and Engineering Building, M102

Telephone: (806) 716-2738

Email: jclopton@southplainscollege.edu

**Office Hours:** All office hours will be held virtually through Zoom. The link to the Zoom meeting is made available in Blackboard.

Monday: 1:00-3:00pm
Tuesday: 10:00am-12:00pm
Wednesday: 1:00-3:00pm
Thursday: 10:00am-12:00pm

And by appointment

Zoom link:

https://southplainscollege.zoom.us/my/jcloptonofficehours?pwd=YVM3UXg2enNXc3RYekc5N0ZXRWYzdz09

**Blackboard:** Blackboard is the online course management system that will be utilized for this course. This course is supplemented online, so all access to course information and your instructor is through the Internet. This course syllabus, as well as all course materials can be accessed through Blackboard. Login at https://southplainscollege.blackboard.com/. The username and password should be the same as the MySPC and SPC email.

Username: first initial, last name, and last 4 digits of the Student ID

Password: Original Campus Connect Pin No. (found on SPC acceptance letter)

**Email Policy:** All students at South Plains College are assigned a standardized SPC email. Log into portal.office.com to access to you SPC email account. The instructor will only acknowledge, respond, and receive emails to your assigned email address.

- My expected response time to received emails is as follows:
  - o For emails sent on Monday-Thursday, I will attempt to respond within 24 hours.
  - o For emails sent on Friday-Sunday, I may not respond until the following Monday.
- I will not be checking / responding to messages sent through the Blackboard messaging system.

### **Course Materials:**

- Required: Notes and homework assignments will be provided through Blackboard
- Reference (optional): OpenStax textbook
  - o College Algebra 2e, Abramson, OpenStax, 2021, https://openstax.org/details/books/college-algebra-2e

## **Course Supplies:**

- Pencils, erasers, 8.5-inch x 11-inch notebook paper, graph paper, non-graphing calculator (such as the TI-30XIIS.)
  - o Note that calculators on cellphones, computers, smart watches, or any other device are not allowed.
- Access to a computer with internet access and webcam
  - o You will need to have Chrome or Edge web browser installed
- Access to cell phone with camera for scanning documents
  - You will need an image to PDF app such as CamScanner or OneDrive.
    - You will be submitting all work into Gradescope<sup>†</sup>. There is a Gradescope app that will allow you to submit your assignments and view your grades

**Attendance Policy:** A record of your attendance will be kept. As stated in the course syllabus, you will be required to attend 80% of the class meetings. If you do not attend class for any reason, you will be counted absent. Should you arrive more than 15 minutes after class has started, you will be counted absent. Tardies count as 0.5 absences. Arriving between the start of class and 15 minutes after class has started counts as a tardy. Leaving before the class is dismissed counts as a tardy. Should

<sup>†</sup> Gradescope grading software allows students to receive faster and more detailed feedback on their work, and allows instructors to see detailed assignment and question analytics. It is an easy way to take submissions digitally in order to preserve the original work and allow for quick and easy viewing from anywhere.

class be canceled, either by South Plains College or the instructor, the student will be responsible for any lecture material presented on Blackboard.

### **Assignments and Grading**

**In-Class Examples:** Lecture videos and notes are made available to you in Blackboard. Before each class meeting, you are expected to have watched the lecture videos and worked through the aligned notes for that day's lesson. You will be required to submit your completed work for the example problems from the notes on a weekly basis. Work will be graded by completion. No late work will be accepted

- 10 @ 0.3 points each = 3 points
- 4 @ 0.3 points each = 1.2 points extra credit

**Homework:** For each lesson you will have an assigned set of homework problems. These homework problem sets are made available to you in Blackboard. You will be required to submit your completed homework on a weekly basis. Work will be graded by completion. No late work will be accepted

- 10 @ 0.5 points each = 7 points
- 4 @ 0.5 points each = 2 points extra credit

**Quizzes:** Quizzes will be given weekly throughout this course. Questions for the quizzes will be taken from, or be similar to, the questions from the homework assignments. Quizzes will be given during the class period. Quizzes must be taken in pencil. No make-up quizzes will be given.\*

- 10 @ 1 point each = 10 points
- 4 @ 1 points each = 4 points extra credit

**Exams:** Exams will be given during the scheduled class times on the dates stated on the course calendar. Exams must be taken in pencil. Once you begin the exam, you may not leave the room until the exam is submitted for grading. Exams will be given during the class period. Exams must be taken in pencil. No make-up exams will be given.\*

• 4 @ 15 points each = 60 points

**Exam Corrections:** Exam corrections will be due following each exam. Exam corrections will done on your graded exam. Exam corrections will be done in a color (pen or pencil) that is distinguishable from the pencil that the exam was originally taken in.

• 4 @ 0.5 points each = 2 points

**Final Exam:** The comprehensive final exam will be given on Monday, December 12th, from 9:00am-11:00am. The final exam will cover all material from the class. No make-up final will be given.

• 1 @ 20 points = 20 points

**Grading Scale:** Your total points accumulated by the end of this course will determine the letter grade posted on your transcript. This grade is determined by the following scale:

A (90-100 pts), B (80-89 pts), C (70-79 pts), D (60-69 pts), F (0-59 pts).

**Assignment Format Policy:** Homework will be submitted as a single PDF file through Gradescope, (a link to Gradescope is available in Blackboard for each homework assignment.) No late assignments will be accepted. The purpose of homework is to provide you with the opportunity to practice and master the material of this course. Be sure to follow the following homework requirements.

- Work must be done on 8.5 x 11-inch notebook paper and written in pencil.
- The first page of you work should have your name, class, and assignment title. You name should be written on each page of your work.
- Work should be done in a neat and legible manner.
  - o Work must be done in either a single column or double column down the page.

<sup>\*</sup> Make-up work will be given at the discretion of the instructor. If you are not going to be in class, you will need to contact the instructor before that class period and have proper documentation that gives reason why you will be absent. You will need to make arrangements with the instructor to take the quiz or exam before the next class period.

- All work must be shown, and the work must justify the answer.
- All answers must be either circled or boxed in.
- When submitting work, scan all pages into a single PDF file.

**Note to Students:** All supplemental material and your current grade are available all semester through Blackboard. The instructor will strive to return feedback by the next workday (M/T/W/R/F); however, they reserve the right to have one week to grade assignments and post grades from the due date.

**Removal from Course:** Should a student decide to withdraw from the course, the student must initiate that process by filling out the *Student Initiated Drop* form found at <a href="http://www.southplainscollege.edu/admission-aid/apply/schedulechanges.php">http://www.southplainscollege.edu/admission-aid/apply/schedulechanges.php</a>.

The last day to drop from an SPC course for the FALL 2022 semester is Thursday, December 1, 2023

Should a student miss 20% of class assignments or class meetings for the semester, the instructor has the right to drop the student from the course with a grade of F or an X.

There is no reinstatement option once a student is dropped.

#### **Resources:**

- Students are encouraged to utilize the availability of the instructor for help during the instructors scheduled office hours.
- Tutoring is FREE for all currently enrolled students. Make an appointment or drop-in for help at any SPC location or online! Visit the link below to learn more about how to book an appointment, view the tutoring schedule, get to know the tutors, and view tutoring locations.

  http://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php
- Tutor.com is a free service to all currently enrolled SPC students. Students have 180 minutes of tutoring each week through Tutor.com.

**Disclaimer:** The instructor reserves the right to alter any class policies/dates as deemed necessary by the instructor and will announce any changes in class or in Blackboard.



Tips for Learning in a Flipped Classroom

This class is a flipped classroom and will operate differently than the face-to-face classroom that you have previously experienced. In a flipped classroom you will spend time outside of class watching and taking notes from lecture videos while during class you will work on you homework assignments. This flipped classroom setting will open more opportunities for me, the instructor, to work with you by addressing homework questions, facilitating class discussions, and having collaborative assignments. Here are some suggestions that will help you operate with in this flipped classroom environment and help you successfully complete this course.

#### **Lecture Videos**

- Watch the lecture videos in a quiet and distraction-free setting
- Silence your cellphone
- Close all other tabs and windows on your computer
- Disconnect from any social media while watching the lecture videos
- Have class notes or notebook and writing device for taking notes
- Use a set of headphones to watch to videos, in order to cancel all ambient noise

# **Note-Taking Tips**

- Take careful notes from the videos
- Draw appropriate diagrams and charts in your notes
- Frequently pause the video to take notes
- "Rewind" the video when you don't understand things
- When the instructor tells you to solve a problem or write something down, do it
- Write down questions in your notes from the lecture video when you don't understand something

### **How to Prepare for Assessments**

- Contact the instructor with your questions and ask the instructor for help and clarification
- Work with your classmates
- Offer to help your classmates with things you understand
- Ask for help from your classmates when they understand more than you
- Take any opportunity to review current and previous material
- Review graded assessments and seek to understand any errors made in your work

Date		Topic	Assignment Due Dates		
Unit 1 – Solving Equations					
Week 1	Mon, Aug 29	Asgmt 1: Linear Equations			
	Wed, Aug 31	Asgmt 2: Rational Equations	Week 1 Exercises and HW		
	Fri, Sep 2	QUIZ 1	Due Fri, Sep 2		
Week 2	Mon, Sep 5	Labor Day			
	Wed, Sep 7	Asgmt 3: Linear Applications	Week 2 Exercises and HW		
	Fri, Sep 9	QUIZ 2	Due Fri, Sep 9		
Week 3	Mon, Sep 12	Asgmt 4: Complex Numbers			
	Wed, Sep 14	Asgmt 5: Quadratic Equations	Week 3 Exercises and HW		
	Fri, Sep 16	QUIZ 3	Due Fri, Sep 16		
Week 4	Mon, Sep 19	Asgmt 6: Other Types of Equations			
	Wed, Sep 21	Asgmt 7: Linear and Absolute Value Inequalities			
		QUIZ 4	Week 4 Exercises and HW		
	Fri, Sep 23	Exam 1	Due Fri, Sep 23		
		Unit 2 – Functions			
Week 5	Mon, Sep 26	Asgmt 8: Functions and Their Graphs			
	Wed, Sep 28	Asgmt 9: Linear Functions and Slope	Week 5 Exercises and HW		
	Fri, Sep 30	QUIZ 5	Due Fri, Sep 30		
Week 6	Mon, Oct 3	Asgmt 10: Distance, Midpoint, and Circles			
	Wed, Oct 5	Asgmt 11: Combination and Composition of Functions	Week 6 Exercises and HW		
	Fri, Oct 7	QUIZ 6	Due Fri, Oct 7		
Week 7	Mon, Oct 10	Asgmt 12: Inverse Functions			
		QUIZ 7			
	Wed, Oct 12	Exam 2	Week 7 Exercises and HW		
	Fri, Oct 14	Fall Break	Fri, Oct 14		
		Unit 3 – Graphing Functions			
Week 8	Mon, Oct 17	Asgmt 13: Quadratic Functions and Synthetic Division			
	Wed, Oct 19	Asgmt 14: Roots of Polynomials	Week 8 Exercises and HW		
	Fri, Oct 21	QUIZ 8	Due Fri, Oct 21		
Week 9	Mon, Oct 24	Asgmt 15: Polynomial Functions and Their Graphs			
	Wed, Oct 26	Asgmt 16: Rational Functions and Their Graphs	Week 9 Exercises and HW		
	Fri, Oct 28	QUIZ 9	Due Fri, Oct 28		
Week 10	Mon, Oct 31	Asgmt 17: Polynomial and Rational Inequalities			
	Wed, Nov 2	QUIZ 10	Week 10 Exercises and HW		
	Fri, Nov 4	Exam 3	Due Fri, Nov 4		
		Unit 4 – Exponents and Logarith	nms		
Week 11	Mon, Nov 7	Asgmt 18: Exponential and Logarithmic Functions			
	Wed, Nov 9	Asgmt 19: Properties of Logarithms	Week 11 Exercises and HW		
	Fri, Nov 11	QUIZ 11	Due Fri, Nov 11		
Week 12	Mon, Nov 14	Asgmt 20: Exponential Equations			
	Wed, Nov 16	Asgmt 21: Logarithmic Equations			
		QUIZ 12	Week 12 Exercises and HW		
	Fri, Nov 18	Exam 4	Due Fri, Nov 18		

Unit 5 – Systems of Equations				
Week 13	Mon, Nov 21	Asgmt 22: 2x2 and 3x3 Systems of Equations		
	Wed, Nov 23	Thanksgiving Break	Week 13 Exercises and HW	
	Fri, Nov 25	Thanksgiving Break	Fri, Nov 25	
Week 14	Mon, Nov 28	Asgmt 23: Matrix Solutions to Systems		
	Wed, Nov 30	Asgmt 25: Nonlinear Systems and Systems of Inequalities	Week 14 Exercises and HW	
	Fri, Dec 2	QUIZ 13	Fri, Dec 2	
Week 15	Mon, Dec 5	Asgmt 26: Determinant's and Cramer's Rule		
		QUIZ 14		
	Wed, Dec 7	Review for Final Exam		
	Fri, Dec 9	Review for Final Exam		
Week 16	Mon, Dec 12	Final Exam		
		9:00-11:00am		